



TECHNICAL REPORT

# Integration of the ASEAN Textile and Apparel Industries in the Post-quota Era

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# Executive Summary

Since the elimination of quotas in the major export markets of the United States and the European Union, the textile and apparel industries have known only one certainty: the next ten years will bring considerable change and competitive pressures will escalate. Sourcing methods, for example, will be simpler and more efficient favoring capable producers that can manage the whole supply chain, maintain compliance with labor standards, and who can offer value added services instead of quota access. Instead of knocking on many doors to find fabrics, accessories, and garment manufacturers, buyers and their agents are seeking “full-package” solutions that allow them to work with fewer supplier that can provide the full complement of services and products they require. Companies that used to handle only a part of the garment making process will have to offer a fuller range of services including , design, sample making, material and accessory sourcing, financing and making up. These changes will favor producers who have ready access to a wide range of needed materials and services of the highest quality and cost effectiveness—producers who operate in an integrated supply chain.

The ASEAN region offers a wide range of products and services along the entire textile and apparel supply chain including fibers, fabrics, garments, machinery, design and logistics. Each ASEAN country has strengths and weaknesses in each of these areas. Some countries have cost competitive making up operations, while others excel at the production of yarns, fabrics dying and finishing. Still others specialize in logistics, design and marketing. National and industry leaders seeking to “do it all”, by maintaining protection for local industries, risk loosing what they already have in the new competitive era. Producers who employ regional rather than only local—isolated—strengths will be in a far better position to defend and advance their market positions in the post-quota era. An integrated supply chain must be cultivated in the ASEAN region to ensure all competitive advantages in the region are leveraged. An integrated supply chain can pay high dividends over many years, not only in sustaining and growing valuable exports, but by employing many of the most disadvantaged in society. By encouraging intraregional trade—through tariff elimination, trade facilitation, and carefully devised trade agreements—and by investing in production machinery, promoting trade, and training factory managers and supervisors the ASEAN region can meet the challenges of the next ten years and beyond.

*Intraregional Trade.* In November 2004, ASEAN members signed the Vientiane Action Plan (VAP), calling for full integration of regional textile and apparel markets by 2010. The plan presents a unique opportunity for advancing the twin objectives of regional integration and strategic restructuring of the textile and apparel industries. To do so, ASEAN members have been reducing and eliminating tariffs, but progress has been uneven. The six original members of ASEAN have cut their intra-ASEAN tariffs on fibers, yarns, fabrics and apparel, and have met their obligations under the ASEAN Free Trade Area (AFTA). Vietnam has agreed to meet its obligations ahead of schedule by reducing tariffs by 2006, while Laos and Myanmar have until through 2008 to meet their obligations. Cambodia, the least developed of the members, and one of the engines of apparel export growth in the region, has to 2010 to meet its obligations under the AFTA.

Still, many tariffs have merely been reduced, not eliminated, to 5 percent or less, which is the requirement of the AFTA. Eliminating remaining tariffs, the objective of the VAP, will provide significant gains. For example, ASEAN materials will clear customs more quickly because a major cause of delay—clarification of product classifications for revenue collection—will have been eliminated. While most ASEAN countries have promised to eliminate all but a handful of tariffs on textile and apparel products by 2010, Cambodia, Philippines, and Vietnam have exempted a significant number of tariff lines calling into question the objectives of the VAP for some of the most dynamic apparel exporters. Eliminating tariffs will also improve market integration and the competitiveness of domestic producers. Many apparel producers in the region, however, operate under special tax regimes, such as free trade zones and bonded warehouses, so ASEAN members must do more to facilitate the rapid flow of goods. Standardizing and implementing regional electronic pre-arrival documentation, for example, could make customs procedures more predictable, facilitate financing and help make intraregional supply chains more rapid and reliable.

Today, intra-industry trade in the region accounts for only about 10 percent of ASEAN imports of fabrics and yarns. This level of trade can not support dedicated ASEAN sales agents and brokers with comprehensive knowledge of ASEAN producers and their products. Increasing the volume of intraregional trade, through promotion and carefully crafted trade agreements, can have a dynamic effect, as higher volumes of intra-ASEAN trade facilitates improved regional trade services, such as dedicated sales agents and brokers. Preferential trade arrangements, such as the EU GSP program, and free trade agreements, such as ASEAN's regional trade initiatives with China, India, Japan and Korea, can be the catalyst for rapidly increasing the volume of materials traded between ASEAN members. Great care must be taken to ensure that the rules of trade negotiated for such arrangements enable and encourage the integration of the regional textile and apparel industries. Most important, rules of origin and cumulation of origin among members must be reviewed to ensure that they permit full leveraging of regional strengths and industry integration.

**Investment.** Investment in new textile machinery in the ASEAN region has been at historically low levels since the Asian financial crisis of 1997–1998. Some ASEAN members, such as Thailand and Vietnam, have started increasing their investment in new equipment, but the region still lags behind the major East Asian producers. New investment is needed to maintain and advance the competitiveness of the regional textile supply chain. Machinery older than seven to ten years, for example, will be hard pressed to meet the quality and cost standards of modern textile machinery, especially weaving looms.

**Trade Promotion.** Textile trade among ASEAN countries is modest but growing; meanwhile rapid changes in international markets due to quota elimination are rapidly restructuring old supply chains. If ASEAN producers are to take advantage of new supply chain relationships, intraregional trade must be promoted. Source It, ASEAN's biggest trade promotion expo held annually in Hong Kong, brings together ASEAN producers to form partnerships, but more sustained promotion and market linkage-building is needed, perhaps in the form of geographic hubs in Malaysia, Singapore and Thailand.

**Training.** The ASEAN region is home to many world-class companies in the textile and apparel industries that have refined their abilities over many years and have earned solid reputations among apparel buyers and agents. Still, they need to boost their efficiency and innovative capacities by training managers and supervisors, especially in apparel firms. Better industrial processes and controls can boost productivity by 10–15 percent in a relatively short period of time. More efficient sampling processes in textile companies can reduce costs and improve service. Apparel companies need new design, management, and marketing skills, while textile companies need to devise new fabrics for niche markets. Many of these needs are common to all ASEAN members and cooperation among members could prove very beneficial.

What should ASEAN members do to ensure that the region's resources are marshaled to compete with large integrated producers such as those in China, India and Pakistan? Industry and government should coordinate in

- Implementing and accelerating programs called for under the VAP, including tariff elimination, reducing or eliminating products on exclusion lists, advancement of customs practices such as the green lane and electronic documentation at the earliest possible time--before the January 1, 2010 target;
- Addressing issues muting investment in new textile machinery, which has lagged because of the waning confidence of financial institutions and high local interest rates;
- Ensuring that regional trade agreements encourage regional strengths over bilateral relationships in new markets;
- Coordinating and advancing technical and managerial training; and

- Promoting the use of regional fabrics and materials by creating trade promotion hubs in key locations.

No one action will ensure the strategic success of the industry or the VAP. With nearly US\$20 billion in regional exports and millions of jobs for some of the most disadvantaged in society at stake, however, the region cannot afford not to neglect the strategic integration of ASEAN's textile and apparel markets and their industry supply chains.



# 1. Introduction

Among members of the Association of Southeast Asian Nations (ASEAN), textiles, apparel, and associated supplying industries comprise the second largest export-oriented manufacturing trade sector. In ASEAN countries and the world, the sector is a leader in generating employment for low-income, low-skill workers. The sector is now moving into an era driven by manufacturing competence, foreign trade agreements, sourcing strategies, and investment thanks to recent implementation of trade agreements, such as the WTO Agreement on Textiles and Clothing (ATC), which eliminated quotas on textile and apparel products. Supply chains, for example, that once favored quota holders over efficient producers are being restructured. Countries previously constrained by quotas, such as China, India, and Pakistan, are investing in their textile and fabric capacities and integrating internal supply chains to reduce costs and continue downward pressure on international prices. Meanwhile, in all regions, less competitive producers in the making-up industry are finding their once secure access to major markets challenged by buyers seeking to reduce logistics costs by trimming their number of suppliers while balancing requirements for cost, capability, and speed to market.

In this new environment, producers in the ASEAN region must recast their strategies to defend or advance their sales. Successful producers will likely be able to leverage more than a single advantage *within* the ASEAN region, but will have to draw on multiple resources—including finishing, design, logistics and/or the making-up industries—to create a fluid supply chain that can compete with large integrated producers in China, India, and Pakistan. In addition, apparel producers will have to become more technically competent, increasing output while improving compliance with labor and safety standards; and textile producers will have to be more responsive to buyers' requirements for short lead times, variety, and sampling. The efficient and effective development of supply chain linkages will depend on investments, rules, regulations, and barriers to trade in the region.

Given the modest levels of intra-ASEAN textile and apparel trade, additional programs are needed to accelerate regional integration. Institutions such as the ASEAN Secretariat and the ASEAN Federation of Textile Industries (AFTEX) are best suited to promoting intraregional trade in supply chain-critical industries through coordination with governments, labor, and

producers. ASEAN members first agreed on a mandate for these actions in the *Bali Concord II* of October 7, 2003. The mandate was elaborated in the November 2004 *Vientiane Action Plan* (VAP) and the related *ASEAN Framework Agreement for the Integration of the Priority Sectors*. These mandates have resulted in the *ASEAN Roadmap for the Integration of the Textiles and Apparel Sectors* (the Roadmap).<sup>1</sup>

The Roadmap includes 45 measures, many of which address all industries and sectors, from wood to electronics. Six items are specific to textiles and apparel. To facilitate a rapid survey, the 45 measures were condensed into three areas of investigation<sup>2</sup>

- Trade barriers and regulations,
- Investment and trade promotion, and
- Manufacturing competencies.

To assess the integration of the ASEAN textile and apparel industries as mandated in the VAP, the ASEAN Secretariat teamed with the US-ASEAN Technical Assistance program, a project supported by the U.S. State Department and USAID. The program fielded two technical experts to assess the competitiveness and capabilities of the regional industry and the supply chain, identify barriers to intra-ASEAN trade and integration, and to identify programs for industry promotion and support. Over a three-week period in August and September 2005, Peter Minor of Nathan Associates Inc. and Donald Feeney of Werner International interviewed

- Textile and apparel associations and industry leaders in Singapore, Indonesia, Vietnam, Cambodia, Thailand, and Malaysia;
- Apparel buyers and their agents in Singapore;
- Individual textile and apparel manufactures in Indonesia, Vietnam, Cambodia, and Malaysia;
- Textile and apparel training schools and institutes in Singapore, Thailand, Cambodia, Indonesia, and Vietnam (via the IFC-MPDF<sup>3</sup>);
- Government officials in Indonesia and Malaysia; and
- ASEAN Secretariat staff.

The consultants also gathered and analyzed publicly available and private sources of data on trade flows, tariffs (WTO Most Favored Nation, Common External Preferential Tariffs, and other preferential tariffs), investment, labor laws, customs clearance, and pre-arrival

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<sup>1</sup> <http://www.asensec.org/16728.htm>.

<sup>2</sup> Arguably, a fourth component would be regional sourcing strategies, but this area is subsumed in regional competencies, trade agreements and investment issues, since they are interrelated with sourcing strategies. Given the diversity of ASEAN member's competencies, there is no one size fits all strategy for regional sourcing of services and material

<sup>3</sup> The IFC-Mekong Private Sector Development Facility is a multidonor initiative surveying the countries of the Mekong river region, including Vietnam, Laos, Cambodia, and the lower regions of China.

documentation. To boost public and private collaboration on the assessment, the consultants attended the AFTEX meeting in Vientiane in November 2005 to discuss their preliminary findings. The approach was designed to add perspective to the *Roadmap* by providing a sampling of regional views and experiences, documenting objectives, and noting progress.

The consultants' initial analysis of data on trade and trade barriers covers all products, excluding fibers, as listed in Attachment I of the *Roadmap*. That attachment includes the ASEAN Harmonized Tariff Nomenclature (AHTN) codes for 1,183 products providing comprehensive coverage of Chapters 50-63. The codes cover fibers (manmade and natural), yarns and fabrics, apparel, and home and industrial textiles. The consultants restricted field interviews and visits to fabric and apparel producers because they make up the majority of value added in the industries and represent the greatest opportunities for integration.

The following sections of this report summarize the status of industry integration in the ASEAN region, describe trade barriers and opportunities, suggest ways to enable investment and promote trade, and describe what industries need to do to improve performance in the context of regional strengths and weaknesses.

## 2. Status of Integration

### **Economic and Social Importance of the Industries**

Many ASEAN countries rely on the textile and apparel industries to generate foreign exchange, income, and jobs that employ the disadvantaged, including young women with few opportunities in the formal sector. Among ASEAN countries, at least four count on the textile and apparel industries for 15 percent or more of their non-oil and gas exports (Figure 2-1). The CLMV countries (Cambodia, Laos, Myanmar, and Vietnam) are even more dependant. Cambodia's apparel exports comprise more than 70 percent of its national exports; and Vietnam depends on textile and apparel exports for 25 percent of its non-oil\gas exports. Among the more developed countries such as Indonesia, Thailand, and Malaysia, textile and apparel exports comprise between US\$3.2 to US\$7.2 billion in exports (Figure 2-2.). While the importance of these exports has diminished as that of other industries such as electronics and electrical machinery has risen, they still provide a steady base of exports and employment while other markets rise and fall rapidly.

The textile and apparel industries are important socially as well as economically. They are essential in breaking the cycle of poverty by offering a path out of an informal sector characterized by underemployment, low education, subsistence wages, and discrimination. Even in countries with other sources of foreign exchange and income, such as tourism, oil exports, or repatriation of foreign capital by migrant workers, light manufacturing exports are crucial in employing unskilled labor, which in turn contributes to political and economic stability.<sup>4</sup> In fact, most workers in textiles and apparel are young women, with few other opportunities (Table 2-1). In Cambodia, official statistics from the garment manufacturing association indicate that women hold more than 90 percent of the 260,000 direct jobs generated by the apparel industry. In Vietnam women—many from rural households—hold nearly 79 percent of the jobs in the apparel industry. Although no hard data exist, it is

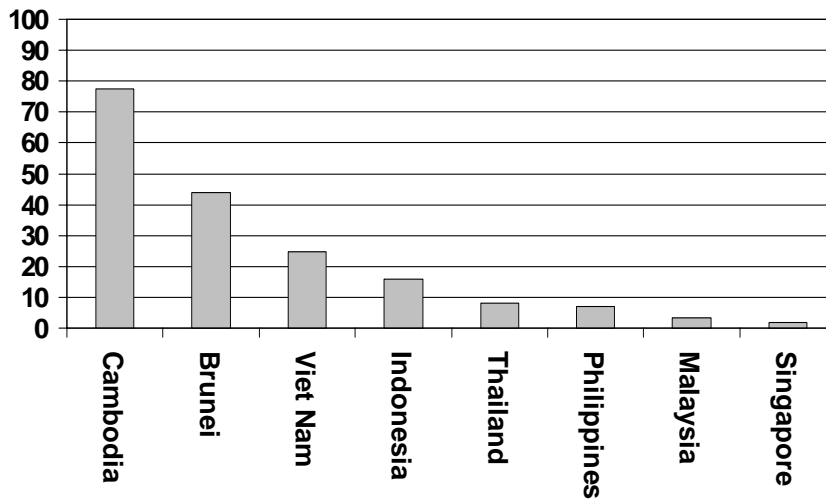
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<sup>4</sup> Jessen, Anneke and Ennio Rodriguez. 1999. The Caribbean Community: Facing the Challenges of Regional and Global Integration. ITD.

recognized that remittances from these workers to families, sometimes located hundreds of miles away, form a social safety net that goes far beyond the factory gates.

**Figure 2-1**

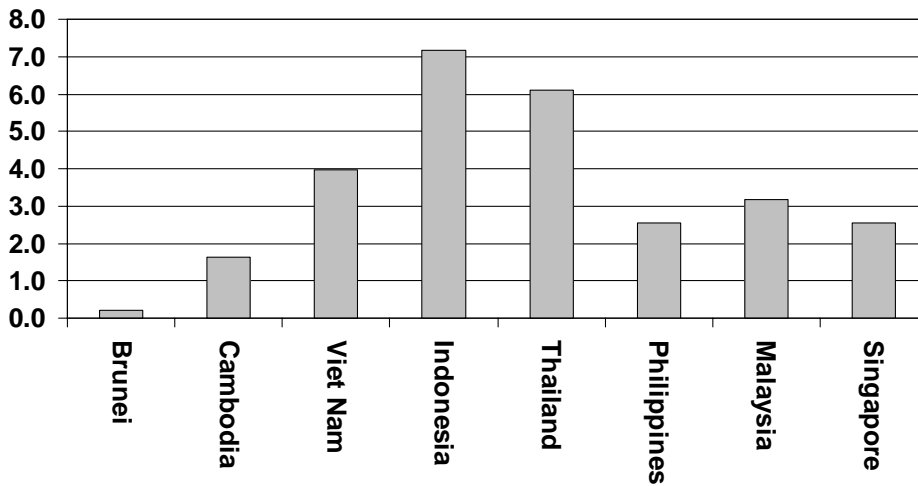
*Textile and Apparel Exports as a Percent of Total Non-Oil and Gas Exports, 2003*



SOURCE: UN COMTRADE Database.

**Figure 2-2**

*ASEAN Exports of Textiles and Apparel, Billions of Dollars, 2003*



SOURCE: UN COMTRADE database.

**Table 2-1***Employment in the ASEAN Textile and Apparel Industries*

Country	Direct Employment			Indirect Employment (services and trade)
	Number	Women (%)	Men (%)	
Indonesia	1,182,871	--	--	2,365,742
Thailand	1,084,130	--	--	--
Philippines	400,000	--	--	--
Cambodia	260,000	91	9	--
Vietnam	1,100,000	79	21	1,000,000

*Notes: Data on Indonesia are for 2003; data on indirect employment in Indonesia is from API. Data on Thailand are for 2003 and are from Thailand Textile Institute. Data on the Philippines are for 2002 and include only employees working in medium and large firms. Data on Cambodia are from 2004 and are from GMAC. Data on Vietnam are for 2004, and are estimated by VITAS. Indirect workers are transport and service works related to the textile and garment industries*

## Progress on Integration as Measured by Trade

The goal of ASEAN integration is the free flow of goods, services, and skilled labor and a freer flow of capital. The November 2004 VAP states, “The overall strategy for realizing an ASEAN Economic Community (AEC) involves deepening and broadening economic integration in the product and factor markets, and accelerating the integration process towards a single market and production base.” Regarding 11 priority sectors, which include textiles and apparel, the VAP states: “...to put in place *all* the essential elements or conditions for ASEAN to function as a single market and production base initially for the priority sectors by 2010.”<sup>5</sup> Before taking stock of factors limiting integration, it is helpful to evaluate progress in the sector since the establishment of the ASEAN Free Trade Area and other initiatives.

Price is the most direct measure of market and production integration: as markets integrate prices converge to the point of a narrow margin determined primarily by transport costs. While price convergence is the ideal measure of intraregional integration, developing comparable price measures for industries as diverse as textiles and apparel with their myriad products is unrealistic—too many qualitative factors, timing, and service components (fashion and delivery) are in play. Moreover, the dominant form of supply chain in the ASEAN textile and apparel industries serves export markets where prices do converge within limits set by product differentiation.

Because of these difficulties in price measurement, we adopt a relative measure of integration: the proportion of intra-ASEAN textile and apparel exports to total ASEAN exports for the industry. Trade flow data are readily available and provide a reasonable basis for measuring integration. As barriers to trade and investment in the region, such as tariffs, customs

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<sup>5</sup> VAP, p 4.

procedures, and pre-delivery documentation fall, intra-ASEAN trade as a proportion of total trade should rise.

Table 2-2 presents data on ASEAN and intra-ASEAN exports for 2000–2004. The total value of intra-ASEAN exports in 2003 was US\$988 million, up modestly from US\$914 million in 2000. ASEAN exports, and integration, measured as a percentage of total textile and apparel exports, were up by even more, having grown from 4.4 percent in 2000 to 5.1 percent of total textile and apparel industry exports.

**Table 2-2**

*ASEAN Exports of Textile and Apparel Products 2000–2004 (US\$ millions)*

	2000	2001	2002	2003	2004
<b>A P P A R E L</b>					
ASEAN Exports	13,483	12,862	12,394	13,020	a
Intra-ASEAN	100	93	112	116	a
<b>F A B R I C</b>					
ASEAN Exports	4,006	3,646	3,256	3,319	a
Intra-ASEAN	512	476	576	582	a
<b>Y A R N</b>					
ASEAN Exports	2,412	2,176	2,227	2,332	a
Intra-ASEAN	276	257	270	253	a
<b>H O M E   A N D   I N D U S T R I A L</b>					
ASEAN Exports	702	734	700	681	a
Intra-ASEAN	26	26	32	36	a
<b>T O T A L</b>					
ASEAN Exports	20,603	19,418	18,577	19,352	a
Intra-ASEAN	914	853	990	988	a
<b>I N T R A - A S E A N   E X P O R T S   R E L A T I V E   T O T O T A L   E X P O R T S   ( % )</b>					
Apparel	0.7	0.7	0.9	0.9	a
Fabric	12.8	13.1	17.7	17.5	a
Yarn	11.5	11.8	12.1	10.9	a
Home and Industrial	3.7	3.6	4.6	5.4	a
Total	4.4	4.4	5.3	5.1	a

*Note: Data for Singapore have been omitted because of the high incidence of re-exports. Data from Singapore Customs indicate that 72 percent of Singapore's apparel exports are re-exports. Including Singapore's exports results would increase intra-ASEAN trade to 6.1 percent of 2003 ASEAN exports.*

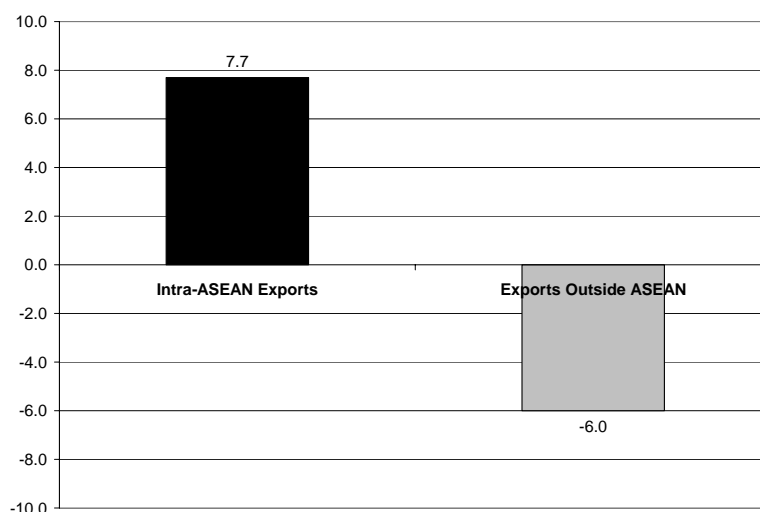
<sup>a</sup> Data for 2004 have not been reported by all members.

SOURCE: UN COMTRADE database SITC 65 and 84.

While growth in intra-ASEAN exports was real in dollar terms (adding US\$74 million over the 2000-2003 period), the greatest gains in the proportion of intra-ASEAN trade resulted from the US\$1.3 billion dollar *loss* in ASEAN exports to other countries and regions. While ASEAN exports outside the region fell by 6 percent in dollar terms, intra-ASEAN exports grew by 7.7 percent (Figure 2-3), illustrating the resilience of intra-ASEAN trade to external shocks and its rising importance in integrated production strategies and market diversification. The textile and apparel industries recognize that integrated regional and local supply chains are less susceptible to market pressures, providing a sound base and an important strategic advantage in a rapidly changing world.

**Figure 2-3**

*Growth of ASEAN Textile and Apparel Exports 2000-2003 (Percent 2000)*



SOURCE: UN Comtrade Database.

The trends for intra-ASEAN exports are divided between upstream supplier industries and downstream consumer products. Although exports of final goods, such as apparel, home, and industrial textiles, are the largest total export earners, the upstream suppliers of fabric and yarn have garnered the highest proportion of intra-ASEAN exports (Figure 2-4). In fact, upstream fabrics and yarns are more than ten times as likely to be traded within ASEAN than downstream textiles. The low proportion of final good sales in the region can be attributed to

- Low incomes in many ASEAN countries and consumers who buy low margin apparel,
- Relatively high transaction costs to trade (in contrast to low margins on products),<sup>6</sup>
- Little product differentiation in local markets.<sup>7</sup>

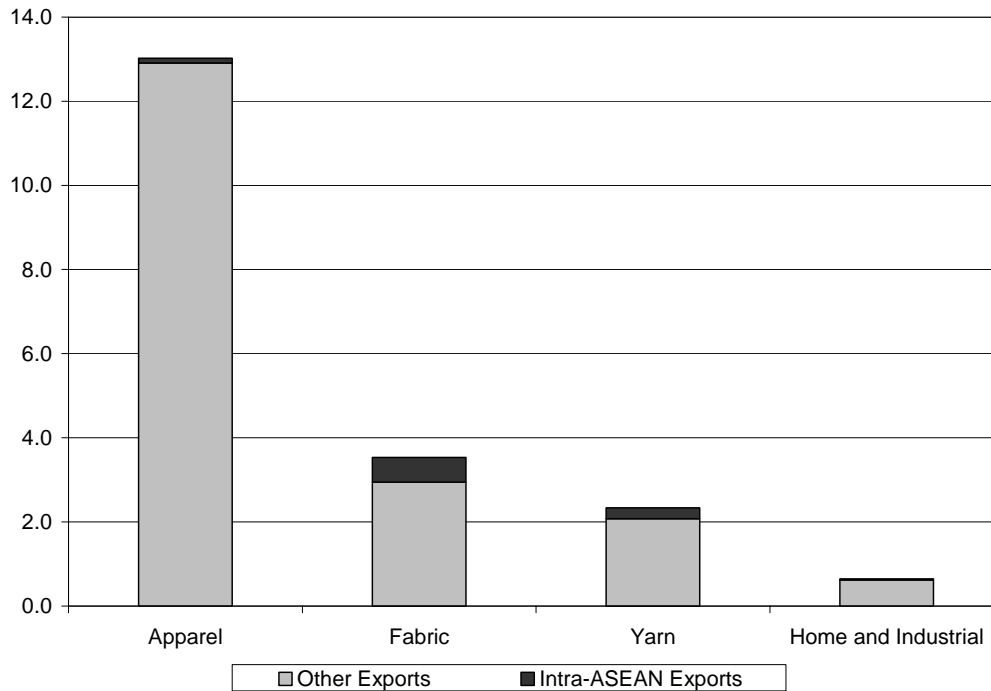
<sup>6</sup> Even with CEPT tariffs, producers face costs for international marketing, credit, customs, and shipping paper work.

<sup>7</sup> Producers interviewed for this study noted the lack of intellectual property rights in local markets, which discourages design and marking innovations.



In contrast, intra-AEAN fabric and yarn trade are driven by ASEAN member's exports of apparel to major markets that can support the higher logistical, administrative, and transaction costs of international trade.

**Figure 2-4**  
*ASEAN Exports by Major Product Categories, 2003 (US\$ Billion)*



SOURCE: UN Comtrade Database 2003. Exports from Singapore are not included.

In sum, intra-ASEAN trade has been rising in most major product areas and has proven resilient to rapid swings in international markets. Integration of ASEAN markets and sourcing strategies have been driven by the need for fabrics and yarns exported to the major developed markets.

A major barrier to greater integration is the level of trade, which is insufficient to support a wide range of intra-ASEAN trade-facilitating services and synergies. As the size of internal trade grows to a minimum level, trade services should lower information and transaction costs. Therefore, a major barrier to growth in intra-ASEAN trade is the current low level of trade.

# 3. Manufacturing Competencies

## Regional Strengths and Weaknesses

ASEAN's textile and apparel industries are diverse and cover the spectrum from small and micro enterprises to medium and large enterprises with 100 to 10,000 employees. These firms are capable of producing the full range of fabrics and garments demanded by world markets, from cotton knit shirts to fashionable wool suits. Strengths of the ASEAN textile industry include the following:

- Competence in internal organization and management (textiles and apparel);
- Ability to manage the entire supply chain – fiber, yarn, fabric sourcing and finance – up to the final customer (textiles and apparel);
- Many world-class companies that have developed business over many years and have highly regarded and valued relationships with existing customers (textiles and apparel);
- Firm-level recognition of the value of social compliance and labor relations complemented by programs set up by international organizations to build on this strength (Cambodia);
- Technological capabilities with experienced technicians (some training centers have been operating for more than 20 years); and
- Natural advantages in manmade and viscose fiber products in certain countries (Malaysia, Indonesia, and Thailand) that contributes to an established vertical industry.

The following weaknesses should be remedied by more investment, trade promotion, and training to boost integration and competitiveness:

- A lack of product research and development and innovation (textiles and apparel);
- A lack of affordable finance for work in progress and for expansion and upgrading;
- A lack of raw materials, especially cotton (many major producing countries, such as China, India and Pakistan, have vertical fiber-to-garment supply chains);
- Textile machinery aging beyond its useful life for competitive export-quality products;

- The general cost structure of ASEAN textile firms is higher than in China.

Apparel companies, agents, and buyers indicate that apparel companies do not source more fabric and supplies from the ASEAN region for the following reasons:

- Fabric nomination (cited most often). Many large buyers for major markets designate from which companies an apparel producer may source fabric and these tend to be large producers in China and Taiwan.
- Material costs. Many buyers and apparel producers indicate that fabric sourced from ASEAN countries costs 10 percent or more than fabric sourced from China or Taiwan.
- Confidence. Many ASEAN apparel producers have not worked with ASEAN textile producers and cultivating relationships will take time and success, which should be based on technical competence and good service.
- Fabric sampling. The ASEAN supplier is said to be unwilling to incur the high cost and risk of frequent sample productions, which is a cost with no income.
- Volume. ASEAN companies are not large enough to meet huge volumes required for bulk orders.
- Quality of materials. Inconsistent quality and inconsistent dye and finishes are problems.
- Delivery. Though ASEAN fabric suppliers are closer to apparel producers in the region, it still can take a week or more to source materials from within ASEAN because of producer delays.

Although each of these areas is a distinct area of concern, they can hardly be considered separately. For example, sampling, material costs and quality of materials are essentials for improving the success of buyers nominating ASEAN fabrics. The confidence of producers sourcing fabrics independently from ASEAN producers can only be established through reliable delivery and cost competitiveness. Therefore, no one area should be considered “more” important than the other. All areas rise with the general state of the industries capabilities.

Investment and trade promotion should build on strengths and shore up weaknesses so the regional supply chain becomes more competitive. Moreover, the region must consider coordinating the advancement of the workforce, from machinist to supervisor, from manager to owner. Cost reductions, better quality, shorter lead times, and greater innovation can be gained as technical staff improve their knowledge of processes and controls in factories. In this way, ASEAN producers can bridge the gap between their prices, quality, and services to beat their competitors, while not compromising their workers’ standard of living.

## **Marketing, Business Administration, and Product Development**

Elements of manufacturing competence common to the textile and apparel industries include marketing, business systems, and product development; managerial and supervisory abilities; and operator abilities. Marketing and business administration skills include product development, locating new customers, and accounting and finance abilities. In the post-quota era, in which many producers are trying to reinvent themselves, these skills are crucial. But many firms, especially apparel firms that depended on the quota system, have not developed these skills. Now that quotas have been eliminated, producers are losing customers as buyers consolidate orders to reduce logistic costs associated with the quota system. This is especially true for local producers (as opposed to foreign direct investors) in previously quota-constrained countries such as Indonesia and Thailand. Although universities in these countries have business and management departments, companies recasting their businesses need special programs. They will need to upgrade preproduction skills beyond marker making and cutting to include fabric financing, design, and pattern making. Groups in the region, such as the Textile and Fashion Federation (TAFF) of Singapore, offer training in these skills and could be collaborated with.

Local textile producers are having difficulty integrating products into the international supply chain because of pricing and their inability to make samples or fabrics that set them apart from mass producers. Unfortunately, except for the Indonesian Textile Institute in Bogor, which offers a four-year undergraduate program in textiles, no training programs or institutes can respond to the needs of the textile industry like TAFF can respond to needs in the apparel industry. Training institutes exist in most countries, but their ability to deliver services needed now is limited. Special donor- or industry-finance programs should be organized to respond to these needs.

## **Managerial and Supervisory Training**

A well run factory depends not only on owners, but the managers and supervisors they employ or train. In the apparel industry, managers and supervisors trained in industrial engineering skills such as time study, line balancing, good housekeeping, and proper machine use are the key to reaching world-class levels of production efficiency, responsiveness, and service. They are also the key to meeting buyers' requirements for labor, safety, product, and security compliance—increasingly critical areas as buyers seek to reduce the number of factories from which they source apparel. Good managers and supervisors, therefore, can, be the difference between success and failure.

While world-class manufacturing facilities are in every country of the region, the vast majority of firms operate at only a 45-50 percent level of efficiency. Well-managed factories usually operate at about 85 percent of potential or better. Most producers, therefore, can boost

their competitive positions by improving factory management. Industry leaders agree that factory management is very weak in the ASEAN region, especially in the rapidly expanding apparel industry, which requires attention if it is to remain competitive; if not, fabric producers will have no market in the region. Site visits and buyer interviews also indicate that many factories undervalue compliance with buyers' requirements. Well trained managers and supervisors are keenly aware of compliance issues, such as worker safety, overtime restrictions, and housekeeping and are technically capable of meeting them while increasing productivity.

Managerial and supervisory training is lacking. Only recently has the Bogor Textile Training Center augmented its curriculum with courses in apparel management and industrial engineering. Even so, the courses are for a two-year degree, which has little value for managers unlikely to leave jobs to participate in these courses. MTMA (Malaysia) offers two- and three-day courses for managers in cooperation with TAFF Singapore. While these courses are helpful, the best training site is the factory floor in a program sustained over several months. Such a program is being started by a USAID-funded project in Cambodia, which will develop a garment training productivity center for managers and supervisors in the apparel industry.<sup>8</sup> Initially, the center will be staffed with European consultants who will train local staff over three years. The center will train managers on the factory floor where it is most effective. The center is coordinating with the Better Factories Program of the International Labor Organization (ILO) to explore synergies to meet buyer-compliance requirements. Buyers, producers, and agents interviewed for this study indicate that this is the single most promising method for improving the competitiveness of the ASEAN apparel industry and that the region should share experiences.

In the textile industry, the potential for reorganization of factories to gain cost advantages is much more limited. Textile factories might be able to gain 5 percent in productivity, but only at a high cost over a period of six or more months. Training technical staff in the proper use of high-quality dye stuffs and efficient methods for producing sample fabrics is more promising. Simply, advances in the textile industry are very limited absent much greater investment in machinery.

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<sup>8</sup> Nathan Associates and Werner International are developing this training center in Cambodia.

## 4. Trade Barriers and Opportunities

### Tariff and Nontariff Barriers

The ASEAN Free Trade Area (AFTA) set the goal of reducing tariffs between ASEAN-6 countries to 0–5 percent for products listed on the Common External Preferential Tariff list (CEPT). Vietnam has agreed to meet that goal by 2006. Laos and Myanmar have until 2008 to reduce tariffs on the CEPT list to the specified level. Cambodia has until 2010. The November 2004 VAP calls for ASEAN countries to eliminate tariffs on textile and apparel products by

- January 1, 2007 for ASEAN-6; and
- January 1, 2012 for CLMV countries.<sup>9</sup>

Members' negative lists of products that will not have tariffs eliminated cannot exceed 15 percent of tariff lines of all products in 11 priority sectors. This does not mean that the list cannot be more than 15 percent of tariff lines within an individual sector. In fact, Vietnam has notified 17 percent of its textile and apparel AHTS lines on the negative list for exemption from tariff elimination (Table 3-1). The Philippines and Cambodia have notified 11 percent of their tariff lines as exempt from tariff elimination.

Textile and apparel producers indicate that information on CEPT is often lacking, which causes confusion. In the worst cases, customs officers hold shipments and demand payment of the tariff in any case. Producers say that there are definitional issues with products and their status as CEPT products as opposed to exclusion lists, and that custom officers often err on the conservative side by charging non-CEPT or exclusion tariff rates or hold the cargo, creating delays. This problem was most often cited in Cambodia where it creates an unusually high barrier to trade for CEPT and non-CEPT products alike.<sup>10</sup> Figure 3-1 underscores the distinct problem in Cambodia as estimated by Nathan Associates: the status of nearly 22

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<sup>9</sup> Part II Article 4 of the VAP.

<sup>10</sup> GMAC, the Cambodian garment association, commented that there was considerable work to be done by the Cambodian government to clarify the tariff schedule and that these are real problems that likely stem from a lack of capabilities within the Cambodian government and customs offices.

percent of textile and apparel products is not clearly identified, exempted, or they are on the negative CEPT list. Given these problems, VAP objectives for Cambodia may not be achieved by 2010.

**Table 4-1**

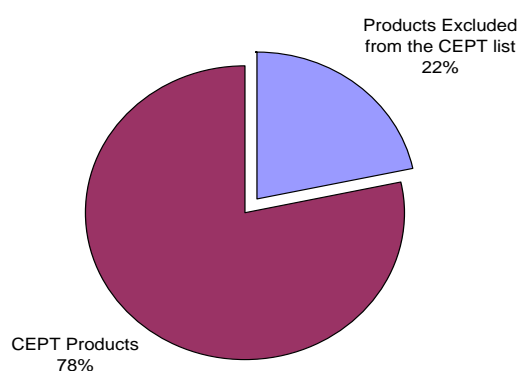
*Textile s and Apparel AHTS Tariff Lines Excluded from the CEPT List*

Country	Tariff Lines Notified on the VAP Negative List for Textiles and Apparel	Percent of Textile and Apparel AHTS Tariff Lines Notified for Exclusion	Products Notified as Negative or not on CEPT List
Brunei	0	0	Work in progress
Cambodia	127	11	257 (tariffs unspecified)
Indonesia	11	< 1	11
Laos	8	< 1	Work in progress
Malaysia	3	< 1	Work in progress
Myanmar	1	< 1	Work in progress
Thailand	24	2	Work in progress
Philippines	129	11	129
Singapore	0	0	Work in progress
Vietnam	206	17	Work in progress

SOURCE: Appendix II of the ASEAN Sectoral Integration Protocol for Textile and Apparel Products. CEPT 202, 2003 and 2004 lists.

**Figure 4-1**

*Cambodian CEPT, Non-CEPT and Exclusion Listed Textile and Apparel Products*



SOURCE: Cambodia's CEPT 2002 CEPT list, 2003 and 2004 TEL lists, and the Industry Exclusion list for the textile and apparel sectors. Sixty-nine products, primarily in knit fabric categories (6003–60067), were not listed as included or excluded and therefore have been counted as excluded according to AFTA rules.

The large number of products exempt from duty elimination are damaging to ASEAN integration since they tend to be concentrated in CLMV countries and countries that have the

highest growth rates for apparel exports in the region. These markets also provide some the greatest opportunities for ASEAN textile suppliers.

In addition, the complex tariff schedules that offer exceptions and varied levels increase delays and corruption.<sup>11</sup> Thus, the VAP—which is “to put in place *all the essential elements* or conditions for ASEAN to function as a single market and production base initially for the priority sectors” and to provide flexibility and exceptions—has an inherent conflict.

The goal of ASEAN textile and apparel industries should be to completely eliminate tariffs on a sector basis; otherwise the benefits of integration will be significantly compromised. That two of the most dynamic downstream producers of apparel, Vietnam and Cambodia, have listed more than 10 percent of their products on negative lists limits the growth of intra-ASEAN trade in textile products. Furthermore, the three countries with the highest number of exempt tariff lines (Cambodia, Philippines, and Vietnam) do not have significant textile yarn, fabric, and finishing capacities for export. The ASEAN Secretariat needs to explore the justification for these exemptions with the representatives of these countries and to promote eliminating exemptions where possible and practical.

## Customs Procedures

Delivery to market is crucial in the apparel industry. Consider a product designed for sale during the Christmas season. On December 15, a shirt might retail for US\$30 or more. On January 5, just 20 days later, that same shirt will retail for \$15 or less. Moreover, buyers often penalize late orders with severe discounts. In the worst cases, producers are stuck with an entire consignment and a buyer who will never return. By some estimates, a one-day delay in an apparel shipment to major markets is equivalent to a tariff of 0.8 percent.<sup>12</sup> A ten-day delay in customs would be equivalent to an 8.0 percent tariff!

During the fifth ASEAN Summit in December 1995 it was announced that a Green Lane System would be implemented for CEPT products by January 1, 1996. The objective of the system is to reduce transaction and time costs for CEPT products by expediting customs clearance. The mandate for the system is vague and lacks performance criteria, stating that the system will consist of random checking and examination of CEPT products, or the creation of a special lane/counter for consignments of CEPT products, or both.

No standards were set, and implementation is up to individual countries. Results have been mixed, but most producers interviewed did not say that customs procedures seemed faster for products imported from ASEAN countries as opposed to other countries. The ASEAN

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<sup>11</sup> *Doing Business in 2006*, World Bank 53-59.

<sup>12</sup> Hummels, David. 2001. “Toward a Geography of Trade Costs.” Purdue University: West Lafayette, Indiana.

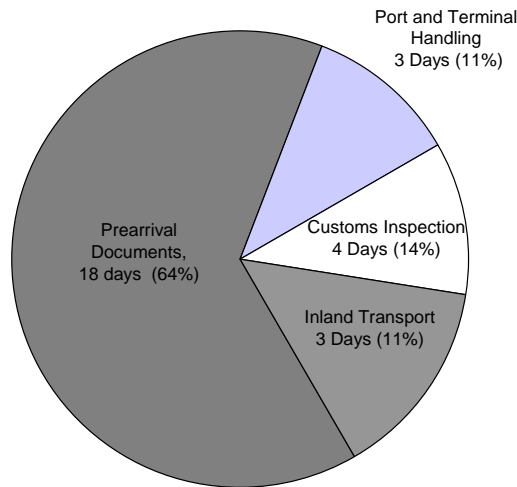


Secretariat is now reviewing a new method for harmonizing and coordinating systems. VAP Part II, Article 8, however, calls for “full implementation of the Green Lane System for CEPT products at entry points of all member states by December 2004.” It is unclear whether this goal will be met by 2010, nor what the VAP was calling for because objective criteria for monitoring and evaluating implementation of the Green Lane System have not been established.

Producer’s expectations for the system often differ markedly from the expectations of government officials. Producers would like a system that works as smoothly as shipping in the EU, while officials are more concerned with security, regulatory compliance, and cargo control. Reconciling these expectations is a matter of understanding restrictions and potential methods for facilitating customs clearance. Other regions, such as the EU, Southern Africa, and MERCOSUR (Brazil, Argentina, Chile, and Uruguay) have customs unions, a more advanced form of free trade area (FTA). A union requires members to eliminate internal tariffs and harmonize external tariffs; to harmonize customs procedures such as health and safety regulations; and to provide preferential rates to member countries (as with the AFTA). In this way, goods external to the customs union pay VAT and tariffs at the port of entry, and move freely within the region unfettered by regional customs offices and cumbersome rules. Goods created in the region then can travel without customs checks at borders for goods produced within the union (rules of origin). Without such a common approach to external tariffs, intraregional shipments require documentation, control, and compliance systems to ensure that goods are not transshipped from low-tariff regime countries (such as Singapore) to high-tariff regime countries (such as Vietnam), and that the destination countries’ health and safety regulations are upheld.

The Green Lane System focuses on customs clearance, but does little to improve the flow of pre-arrival documentation, such as declaration forms, bills of lading, and invoices. This greatly limits the potential of the system to reduce barriers to trade across borders. Figure 3-2 illustrates benchmark data for the time it takes to import a product, including time for pre-arrival documentation. The benchmarks are for a producer working outside free trade zones or bonded warehouses, which are the dominant trading arrangements in ASEAN’s textile and apparel industries.

While all areas are important, pre-arrival documentation poses the greatest barrier, comprising more than two-thirds of the time for importing. In the absence of a customs union, the most effective way to reduce barriers to cross-border trade and improve the flow of goods in the ASEAN region is to streamline documentation.

**Figure 4-2***Days Required to Import Products in East Asia, January 2005*

*Note: Time periods are averages based on importing by a firm that is not in a free trade zone or bonded warehouse.*

*SOURCE: World Bank Doing Business 2006.*

The importance of pre-arrival documentation varies. For producers with regular standardized shipments, planned months in advance, the time and cost of such documentation is not crucial. But for producers wanting to fill a niche or replenish supplies quickly, or for those seeking outsourcing opportunities, sales opportunities depend on that documentation, which becomes a wedge between what is possible and what is not.

The best way to reduce time costs in trade is to eliminate excessive handling of paper and requirements for signatures (Table 3-4). Electronic document systems have been employed throughout the world, including in Singapore, with great success. In 2005, the Malaysian Textile Manufacturers Association implemented an electronic certificate of origin (eCO) system that reduces the paper work, time, and uncertainty of registering a product as originating in the ASEAN region (a requirement for obtaining CEPT product status). Obtaining certificates now takes hours instead of days. eCOs with incorrect data are flagged and producers are notified immediately by cell phone or e-mail so they can correct simple mistakes that used to result in frustration and costly delays. The system, which covers conventional COs (non-preferential) and is expected to be expanded in the near future. Electronic document handling systems can also be integrated with customs systems at major ports so data can be used in a risk management system to reduce the number of physical inspections of containers from ASEAN countries. This kind of integration reduces clearance times and lead times to maximize outsourcing opportunities while maintaining control and compliance.

**Table 4-2***Number of Documents, Signatures, and Days Required to Import in the ASEAN Region*

Country	Documents	Signatures	Days
Laos	16	28	78
Cambodia	12	18	55
Vietnam	9	15	36
Indonesia	10	6	30
Thailand	14	10	25
Malaysia	12	5	22
Philippines	8	7	22
Singapore	6	2	8

*SOURCE: World Bank, Doing Business in 2006.*

## Free Trade Agreements

Multilateral negotiations in the WTO have stalled and their ability to advance market access in manufacturing sectors has been called into question. In response, ASEAN countries have initiated bilateral free trade negotiations with Japan, the United States, and the EU as well as with Korea, India and China, among others. Some ASEAN members, such as Singapore, have completed free trade agreements with major markets such as the United States, New Zealand and Japan. Free trade agreements not only offer an opportunity to rapidly advance sales in large, affluent consumer markets, but also to advance the integration textile and apparel industries in the ASEAN region.

Negotiations to reduce tariffs mark the first step in advancing market access. But while tariff cuts—and exemption lists and phase out schedules—are necessary for any free trade agreement, they are rarely sufficient to maximize benefits, or ensure that, for example, the strengths of the ASEAN region result in greater benefits and integration of the textile and apparel industries.

To ensure that the advantages of free trade agreements are fully realized, and that the strengths of the ASEAN industries are leveraged to maximum benefit, ASEAN members must coordinate well in nontariff barriers and rules origin and cumulation. They must take care in mapping out and coordinating origin and cumulation rules so that ASEAN countries that are parties to a free trade agreement with a third country can use the region's resources and still qualify for tariff cuts under their respective agreements. Members need to strike a balance between regional integration of supply chains and ensuring the benefits of free trade agreements are limited to regional members.

## BILATERAL TRADE AGREEMENTS

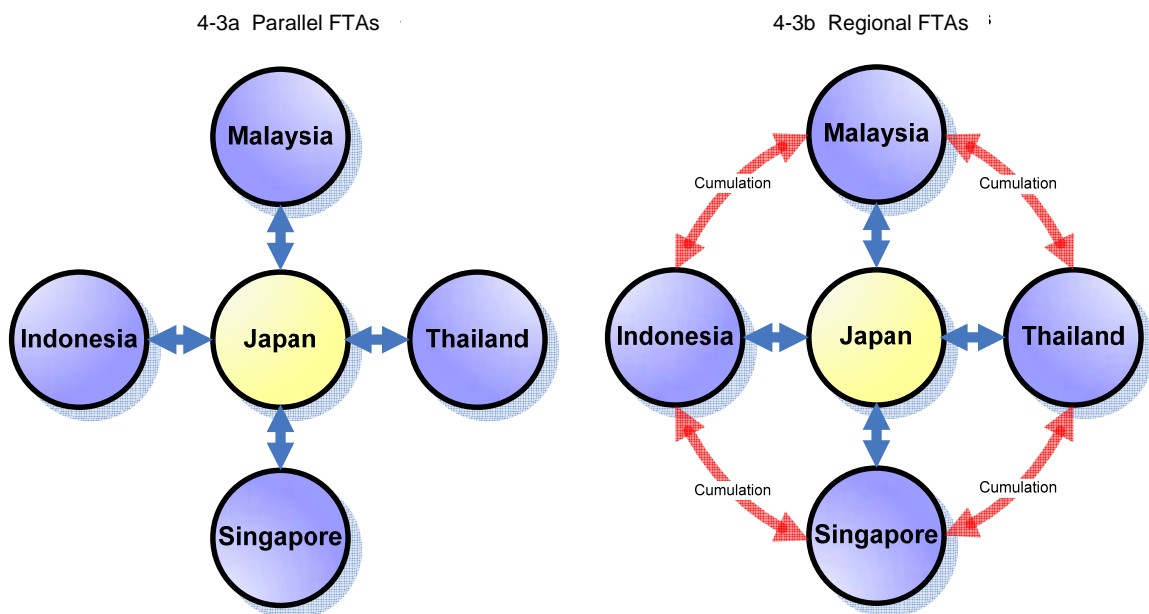
ASEAN bilateral agreements fall into two groups:

- Parallel undertakings (e.g., Thailand-US, Singapore-US); and
- Regional undertakings (e.g., ASEAN-China, ASEAN-India, ASEAN-Korea, ASEAN-Japan).

Parallel undertakings have been the most common approach: two parties negotiate and the benefits of the resulting agreement focus on trade between the parties. Under these types of agreements, rules of origin are usually written to restrict trade benefits to the two parties. The arrows in Figure 3-3a illustrate the flow of materials and final goods eligible for tariff reductions in parallel FTAs. These types of arrangements are like the hub and spokes on a wheel, but without a rim to link them. This is similar to the U.S. approach to its free trade agreements, although the United States is somewhat willing to allow supply chains between trade partners to integrate.<sup>13</sup> The EU has endeavored to expand its integration of trade agreements and regional supply chains by proposing massive changes to free trade agreements in the EuroMed area (Northern Africa and the Middle East).

**Figure 4-3**

*Two Approaches to Free Trade Agreements and Regional Integration of Supply Chains*



SOURCE: Nathan Associates Inc.

<sup>13</sup> In the case of the United States, parties to an agreement such as the North American Free Trade Agreement (NAFTA) can trade freely among themselves, but have only limited ability to integrate supply chains with other U.S. free trade partners, such as the Central American countries, Israel, or Chile.

Regional undertakings have become increasingly popular in the past five years, largely because of slow progress in WTO negotiations and the exploding number of parallel undertakings. Regional undertakings seek to simplify the negotiation of bilateral agreements with numerous trading partners in order to conclude more agreements in a shorter period. These undertakings cut administrative costs by bringing several potential parties together to agree on general structures—a potentially exhaustive effort when carried out on a bilateral basis with each party. However, administrative simplicity and efficiency does not mean that the regional undertaking will ensure that rules and regulations negotiated between parties will be standardized, or that provisions will leverage regional supply chains. In short, they may result in a proliferation of bi-lateral agreements with few possibilities for resource sharing and supply chain linkages.

Another and perhaps more important reason for regional undertakings is that they can ensure that regional resources and supply chains are used. This is crucial in industries that rely on supply chains, such as textiles and apparel. In parallel undertakings, yarns, fabric, and final goods are traded between two partners whose goods meet their agreement's rules of origin. Where there are no provisions, or rules are excessively restrictive for cumulating the origin of products from one FTA to the other, there is no incentive to leverage regional strengths and integrate regional supply chains. Consider the possibility of both Indonesia and Malaysia having parallel FTAs with Japan (Figure 3-3a). Without provisions for cumulating goods between the two FTAs, integration of the supply chains of Indonesia and Malaysia is very limited. But, if as part of the regional undertaking Malaysia and Indonesia ensure that the rules of trade allow for each to use intermediate inputs originating in multiple FTA partners (cumulation), then regional integration is given a tremendous boost (Figure 3-3b) and the benefits of the FTA are maximized as the strengths of the region leveraged.

The concept of regional undertakings is attractive because they are expected to result in well integrated trade blocs with rules and regulations harmonized across all countries. In practice, however, ASEAN FTAs are being negotiated on a bilateral basis. In this case, ASEAN members negotiate as a group a framework agreement with a partner country, such as Japan. This agreement is then no more than a starting point for individual member's negotiations, presumably on a bilateral basis with the prospective trade partner. Completed bilaterals may well result in significantly different rules and regulations with little prospect for regional integration. This approach recognizes the varying degrees of complexity of negotiating FTAs with each ASEAN member—some are ready to conclude agreements, others are more reluctant. To be sure it accelerates the pace at which these agreements may be concluded and fully satisfies the non-ASEAN partners. The risk of this approach is that the rules of each

agreement will differ enough from the others to make regional integration of ASEAN industries difficult or, as happened with numerous European FTAs, impossible.<sup>14</sup>

The potential to integrate trade agreements in a regional approach is determined by the rules of origin in the agreements. Rules of origin define the products and materials that make a product eligible for tariff reduction. Where the rules are simple, such as with the AFTA rules for textiles, cumulation of origin rarely poses an obstacle to regional trade; but, as rules of origin become more restrictive and complex (such as the U.S. yarn forward rule, and the EU fabric forward rule) cumulating supply chains between trade agreements can become nearly impossible without complex rules and extensive systems of controls and compliance—a real risk ASEAN countries face when negotiating trade agreements individually.

## RULES OF ORIGIN AND CUMULATION

While the elimination of tariffs is the obvious benefit of FTAs, secondary benefits are tied to the rules and regulations that govern the agreement. For textiles and apparel, rules of origin, which define which products are eligible for tariff elimination, are of the highest importance and should be considered as important as tariff elimination itself. Rules of origin in textiles and apparel are usually based on one or more of three different methods:

1. Value added criterion which define how much processing must be carried out on nonoriginating goods. For example, the AFTA agreement designates that 40 percent value added must be carried out on a nonoriginating textile material to be eligible for duty-free treatment;
2. Specific processing or workflow requirements;
3. Change of tariff classification (CTC) in the harmonized tariff schedule (also provided for in the AFTA).

The purpose of each method is to ensure that benefits are restricted to parties to the agreement. Each method has advantages and methods can be mixed to accommodate an industry's special requirements. The most prevalent method in the textile and apparel industries is the CTC method because it closely follows the processes of the industry's supply chain<sup>15</sup>. It is also in harmony with established tariff classification systems so it is much easier to monitor control and compliance.

Figure 3-4 shows the major products of processes defined by chapter heading changes in the World Customs Organization's harmonized tariff system. The least restrictive rule of origin is the single transformation rule, which requires that the work carried out on inputs results in a

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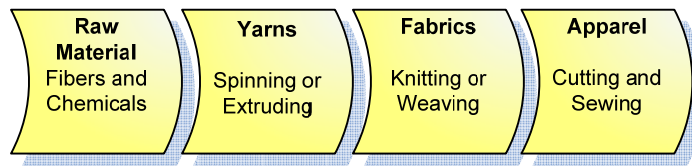
<sup>14</sup> The process of European free trade expansion in North Africa and the Middle East provides an excellent example of the dangers to regional integration by negotiating free trade agreements on a bi-lateral basis.

<sup>15</sup> This stands in contrast to other sectors, such as automobiles and parts, that principally employ the value added criteria.

change of tariff subchapter heading. For example, the cutting and sewing of fabric results in a substantially different product (apparel) and a change of chapter heading from fabric to apparel, so cutting and sewing confers origin, even if the fabrics are imported from a country outside the free trade region. Likewise, knitting or weaving confers origin, since it results in a change of subchapter product classification from yarn to fabrics. AFTA uses this single transformation rule. When a single transformation rule is used, cumulation of origin between three or more trading partners among parallel FTAs is rarely a problem.

**Figure 4-4**

*Major Stages of Processing as Defined by the WCO Harmonized Tariff System (chapters and subchapters)*

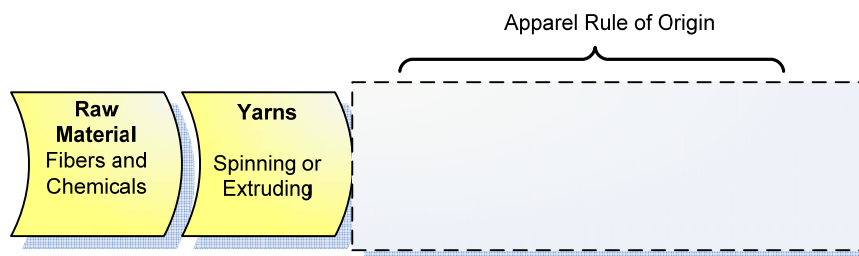


SOURCE: Nathan Associates Inc.

The single transformation rule, however, is the exception in FTAs involving the textile and apparel industries throughout the world. Instead, two or three levels of transformation are almost always used. The reason is simple: upstream textile fabric and yarn industries gain little from an FTA unless the rules of origin require their use. Figure 3-5 shows the rule of origin proposed for apparel by the Japanese Textile Federation under a proposed Japan-Indonesia FTA. Note that the Japanese Textile Federation has inserted a subprocess or workflow requirement—dyeing and finishing—not reflected in the common HTS chapter and subchapter classification. The addition of dyeing and finishing recognizes their significant value added, and the common practice of purchasing or producing greige fabric and having a third party finish or print it. The result is that this proposed rule of origin requires that FTA partners perform three processes to obtain a tariff reduction: knitting\weaving; dyeing, printing and finishing; and cutting and sewing.

**Figure 4-5**

*Apparel Rule of Origin Proposed by the Japanese Textile Federation*



SOURCE: Nathan Associates Inc.

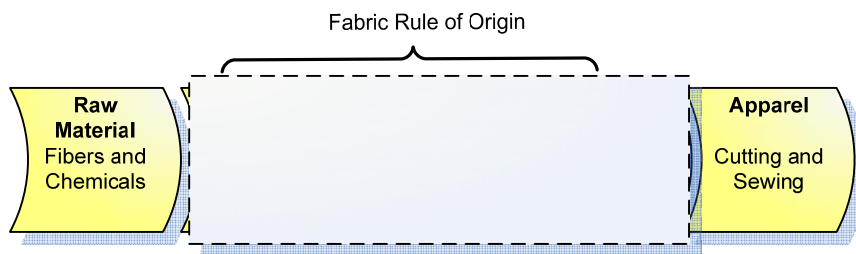
When two or more processes are needed to obtain originating status, the need for clear cumulation rules becomes obvious, since it is very common in the supply chain for fabric to be formed in one country (Thailand), dyed or printed in another (Malaysia), then cut and sewn in another (Indonesia) for final shipment to a fourth party, such as Japan. Without clear cumulation rules, the integration of the regional supply chain would be limited.



Two systems of cumulation are common: (1) diagonal and (2) full. Diagonal cumulation is most often employed because it provides a sound method for ensuring control and compliance with origin rules and reduces paper work. It requires that a country perform an origin-conferring process on any nonoriginating fiber, yarn, or fabric before it can be traded with another member of a regional trading bloc for additional processing under the FTA. For example, under the rules presented here, a member would be required to carry out the three processes required to obtain originating status for fabric if the fabric is formed of nonoriginating fibers (requiring spinning, knitting, and finishing, as in Figure 3-6) before being shipped to another member for additional processing, such as cutting and sewing, and then being shipped to the consumer market, such as Japan. The number of potential partners involved in the supply chain then increases from two to three, a major advantage over the situation with parallel free trade agreements alone, but less than under full cumulation

**Figure 4-6**

*Finished Fabric Rule of Origin Proposed by the Japanese Textile Federation*



SOURCE: Nathan Associates Inc.

Full cumulation allows for the separate processes to take place in any party to separate bilateral FTAs. Fabric might be woven in Thailand, finished in Malaysia, and cut and sewn in Indonesia. This would appear to be the obvious solution to the problem of regional integration. But this method is rarely used because it is difficult to ensure control and compliance over materials and processes in two, three, or more countries. The required paper work, inventory controls and documentation often so overwhelm companies and customs officers as to make full cumulation impossible to use outside a customs union, such as the EU.

A full review of textile and apparel rules of origin and regional cumulation are beyond the scope of this report, but these few examples illustrate the complexities that need to be addressed and coordinated before regional trade agreements are concluded.

## Preferential Trade Arrangements

Preferential trade arrangements provide lesser and least developed countries unilateral access to developed country markets. These arrangements are permitted under the WTO enabling clause and do not require reciprocal tariff reductions, as with FTAs. Preferential arrangements

hold particular value for developing countries because developed country textile and apparel tariffs tend to be among the highest of all tariffs on manufactured products. Although both the United States and the EU have preferential programs under the WTO generalized systems of preferences (GSP), only the EU provides preferential access for textiles and apparel. The EU GSP program provides two levels of preferential access to ASEAN countries. First, it eliminates apparel tariffs, which average 12 percent, for products from Cambodia and Laos that meet the EU GSP rule of origin. Second, it provides a tariff reduction of 20 percent (or a duty rate of 9.4 percent) for other ASEAN countries meeting the rule of origin. Generally, the EU rule of origin does not permit ASEAN countries to cumulate origin among each other, so apparel must not only be cut and sewn in one country, but the fabric must also be formed and finished in the same country<sup>16</sup>. Therefore, the general EU GSP rule of origin does not encourage regional integration. The EU's derogation to the general GSP apparel rule of origin for Cambodia and Laos, however, does permit apparel producers in these countries to use fabrics originating in other ASEAN countries (cumulation), subject to additional restrictions and requirements. Since this derogation permits the use of fabric formed anywhere in the region, it is an important incentive for integration of the regional textile and apparel industries.

The cumulation provision provided under the EU derogation to the apparel GSP rule of origin permits diagonal (as apposed to full) cumulation for fabrics originating in ASEAN countries. The diagonal cumulation rule requires a stricter standard than full cumulation, since the fabric must be originating in a single ASEAN country before it can be eligible for further processing in Cambodia or Laos. Therefore, the fabric must be formed through spinning, knitting\weaving, and finishing in a single ASEAN country before it is eligible for cumulation in Cambodia or Laos. Meeting the EU rule of origin for fabric under the GSP program is a necessary though not sufficient step for cumulation of origin in Cambodia or Laos. To be eligible for tariff-free treatment in the EU market, apparel constructed of originating ASEAN fabrics must have 51 percent value added in Cambodia or Laos.

Though they limit the usefulness of the special origin rule for Cambodia and Laos, these restrictions are not prohibitive and encourage regional integration of ASEAN's textile and apparel industries. In particular, the rules can be met with lower value fabrics, such as polyester\cotton blends combined with more complex making-up processes, such as those required for trousers, woven shirts, or certain lingerie. ASEAN countries would do well to petition the EU to cut the value added requirement from 51 to 40 percent so higher value fabrics could be used or simpler garments made up. As of 2004, only about one-third of Cambodia's exports go to the EU, with the balance going to the U.S. market. Promotion of the EU tariff provisions should be carried out in the ASEAN community, resulting in greater integration of the textile and apparel industries.

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<sup>16</sup> The EU rule of origin does not restrict finishing, printing and dying explicitly, but it is rendered moot by the direct shipping requirements, adding yet another dimension to the complexity of the agreement.

## 5. Investment and Trade Promotion

The flow of textile yarns and fabrics is the key to supply chain integration among ASEAN members. Fabrics and yarns are ten times more likely to be traded in ASEAN than finished goods, such as apparel or home furnishings (Table 2-2, Figure 2-4). In other words, trade in textile fabrics and yarns *is* ASEAN *integration*. Without viable fabric and yarn production, industry integration will not be possible. Eliminating trade barriers and creating special customs procedures and electronic documents will do much to boost intra-ASEAN textile trade, while improving apparel producers' input costs, access to a greater variety of raw material, and services.<sup>17</sup>

### Enabling Investment

To remain competitive a textile company must renew equipment stocks with machinery capable of providing the cost and quality advantages of modern knitting, weaving and finishing processes. Consistency of fabric quality and dye and finish are essential. Modern looms are now so well controlled and engineered that they produce fewer weaving faults and have end-break detecting features that eliminate a fault if yarn does break. Looms purchased in the past seven years meet this specification. Weaving machinery older than seven to ten years will be hard pressed to produce the quality and competitively priced fabrics that export markets demand. Meanwhile, dying, printing, and finishing machinery installed in the past ten years is usually sufficient to meet the needs of world markets so long as producers maintain machinery, follow standards, and use high quality dye stuffs. Dying and finishing facilities are most economical when run 24 hours per day, seven days per week. Size is also important; competitive textile companies run 300 or more modern looms, perhaps with large dying and finishing plants capable of producing 40 million linear meters each year.

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<sup>17</sup> Although under the AFTA rule of origin, the cutting and sewing of fabrics from outside the region confers origin, this situation is rarely encountered and reduces the value of AFTA integration by limiting the value added in the region to the cutting and sewing alone.

It is therefore essential to ASEAN integration that the textile industry not only augment stocks of machinery, but also replace old machinery with modern equipment on an ongoing basis. Producers need to invest in well trained engineers, laboratory staff, planners, and supervisors. Without a vibrant and growing textile sector that is competitive, integration of the textile and apparel sectors will proceed slowly at best or decline.

In 2004, ASEAN producers purchased 1,120 new shuttle-less looms; producers in East Asia (China, Hong Kong, Taiwan, Korea) purchased more than 50,000 (Table 4-1). As a percentage of existing stocks, ASEAN producers augmented or replaced less than 1 percent of their stock of shuttle-less looms; East Asian producers augmented or replaced stock at a rate of nearly 10 percent. At the current rate of investment, East Asian countries will have augmented or replaced their stock of shuttle-less looms in ten years, while ASEAN producers will take more than 100 years – an unsustainable situation.

**Table 5-1**

*Shipments of New Shuttle-Less Looms and Installed Capacity 1995–2004*

Country \ Region	No. Installed, 2003 <sup>a</sup>	No. of Shipments (new), 2004 <sup>b</sup>	New Looms as Percentage of Capacity	No. of Shipments Since 1995 <sup>b</sup>
Indonesia	63,000	151	0.2	11,276
Thailand	103,500	471	0.5	5,568
Malaysia	4,000	117	2.9	4,242
Philippines	2,500	10	0.4	474
Vietnam	1,900	371	19.5	4,673
Cambodia	--	0	--	--
Singapore	--	0	--	--
ASEAN Total	174,900	1,120	0.6	26,233
China	409,026	48,231	11.8	258,408
Taiwan	52,214	912	1.7	28,540
Hong Kong	4,700	606	12.9	7,982
South Korea	43,390	354	0.8	23,696
East Asia Total	509,330	50,103	9.8	318,626

*Note: Looms include air\water jet and projectile (Rapier).*

*a Used and new looms.*

*b Shipments of new equipment reported by manufactures.*

*SOURCE: ITMF 2004 Statistics.*

ASEAN producers echo this sentiment. In Indonesia, representatives of the producer's association (API), indicated that no or little investment in new textile machinery has occurred in that country since the 1997/1998 financial crisis. At a current replenishment rate of 0.2 percent, Indonesia's stock of textile equipment is aging rapidly, while the world is demanding

higher quality at lower cost. The Thai textile manufactures association could only report slightly better investments in textile equipment; the industry has invested enough to maintain technology, but new capacity is scarce. Only Vietnam can claim to be advancing its capital stock in the textile sector, thanks to new foreign investments.

International data on purchases of dying and finishing equipment are not available, but apparel and textile producers in the region cite the lack of capacity as a great deficiency and barrier to integration. Dying, finishing and printing equipment are essential in the textile and apparel value chain because dying and finishing impart most of a textile product's character. Without it, a product is little more than a commodity. For example, a vertically integrated textile and apparel firm in Indonesia ships a large portion of its gray (unfinished) fabric to other countries (sometimes outside the region) for finishing and final sale—even though the firm owns large making-up operations. Without local or regional dying and finishing capacities, the firm is unable to convert fabric into salable products. Buyers cite the lack of innovation in fabrics as another weakness--dying and finishing operations being crucial to the ability to produce innovative fabrics.

The low investment rates in ASEAN date back to the Asian financial crisis of 1997/1998. At that time, many textile producers were on the verge of bankruptcy, lacking even the cash flow to honor letters of credit and other important financial instruments. This damaged their credit rating. Many producers had problems meeting new bank collateral rules that required securing loans with assets held outside the country. Foreign direct investments slowed to a trickle. In Indonesia, new laws enacted as a result of political changes increased labor costs, encouraged corruption, and reduced government transparency to the point of discouraging existing as well as new investors.

Interest rates have also been exceptionally high; local rates in Indonesia have reached 17 percent. The combined effect of stiff collateral requirements, a perception of high international risk, and high interest has made it infeasible for local investors to purchase new equipment or upgrade facilities<sup>18</sup>. Foreign investors are only now returning to the region to pursue opportunities in the rapidly growing Vietnamese export markets.

The lack of investment, past and present, in the Indonesian textile sector should be a top concern for the ASEAN region when considering integration—since it is a strategic imperative. The ASEAN sectoral initiative should include joint initiatives to attract foreign investment inside the region. Existing producers should be supported with programs that help them meet credit requirements and create innovative investment vehicles with textile

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<sup>18</sup> According to one of the only recent World Bank IFC textile investment initiatives in Indonesia the project's expected benefits would include " IFC sending a positive signal to foreign investors that is still feasible to invest in a sound project in a country where there is a dearth of foreign investment due to perceived high country risk".

machinery manufactures from Japan, China, and Europe. Textile machinery trade shows in the region should include seminars on financing mechanisms.

The recent application of safeguards by the United States and EU to limit apparel imports from China will provide little relief to ASEAN textile producers. Fabric being converted into apparel in China, which is now limited by safeguards, is expected to be diverted to the ASEAN region, where it will be made-up into garments for sale to the United States.

## **Promoting Trade**

Only about 10 percent of yarns and fabrics imported by ASEAN countries for apparel are sourced from within the region. Most are sourced from China, Taiwan, and South Korea. While many apparel buyers cite fabric costs and the nomination process as barriers to integration of the ASEAN textiles and apparel industries, they also indicate that there are opportunities, especially outside the traditional fabric nomination process, for suppliers who provide unique products and services. A major obstacle for ASEAN textile and apparel producers seeking to fill these niches is their ability to locate opportunities in the region. For many textile producers, the cost of developing new, direct, market linkages to producers of ASEAN apparel in the region is too high because of language barriers, logistics, communication, and marketing costs. The sourcing process greatly favors East Asian intermediaries, agents, and brokers who are more familiar and inclined to match East Asian textile suppliers with the requirements of apparel producers in the ASEAN region.

To partly address this problem, ASEAN's annual textiles and apparel trade fair—Source It—promotes ASEAN countries as a fully integrated sourcing region offering a wide range of products covering the entire textile industry: fibers, fabrics, garments, machinery, design, and license. The fair is held in Hong Kong to garner greater participation from the buying and sourcing community. Source It presents an excellent opportunity for buyers to seek new material and service providers, and ASEAN producers should be encouraged to participate.

Global textile and apparel industries, however, are moving toward a model in which the apparel producer is responsible for managing the supply chain, including design, fabric sourcing, and financing in addition to traditional CMT processes. This shift in responsibilities to the producers and their agents presents a unique opportunity for ASEAN's textile and apparel industries.

Further industry promotion could lead to previously unexploited supply chain linkages in the region. Since East Asian buyers and agents control the dominant model of linkages, a new path should be explored. Today, no agents specialize in sourcing only from ASEAN suppliers. To overcome this obstacle, a new breed of sourcing agent should be established to promote ASEAN suppliers and supply chain linkages. A pilot project to explore these avenues could

be established at a relatively modest cost. At first, two agents could be staffed at strategic locations. For example, an agent in Singapore or Malaysia could be a point of contact for business in Indonesia, Malaysia, Philippines, and Singapore. Another could be located in Thailand to cover the textile and apparel industries there and in Cambodia, Vietnam, Laos, and Myanmar. The agents, who would have to speak many languages and understand the industry very well, would coordinate with each other and with producers in their sub-regions to make new market linkages within ASEAN. The goal would be to create more market linkages in ASEAN for services and products produced there.

## 6. Conclusion

The textile and apparel industries of ASEAN members have long provided high quality material and products to major markets. Today these industries contribute nearly US\$20 billion in exports from the region and employ millions, including some of society's most disadvantaged. The elimination of textile and apparel quotas in accordance with the WTO agreement on textiles and clothing is rapidly changing the world in which ASEAN members compete. To ensure that they maintain or advance their positions in world markets, they will need to restructure large segments of their supply chains. Specifically, ASEAN producers will need to integrate their regional supply chains to ensure long-term competitiveness. At present, supply chain integration among ASEAN countries is limited – less than 10 percent of apparel manufactures' materials are sourced from other ASEAN members. Ensuring that the industry adjusts and is able to use all of the region's advantages will require undertaking a number of activities:

- Implementing and advancing all areas of the VAP, including eliminating tariffs on textile and apparel products in the region, eliminating exclusion lists, and advancing phasing schedules for CLMV countries to achieve a duty-free zone for ASEAN textiles before 2010 for all ASEAN members.
- Implementing electronic document systems and reducing the number of random checks required for ASEAN certified shipments (green lane provisions).
- Promoting the use of ASEAN materials under the EU preference system
- Coordinating new regional FTAs to ensure that materials from the region can be used to maximum advantage.
- Coordinating with banks and donor agencies, such as the World Bank and IFC, to increase investment in textile machinery and working with machinery manufactures to find new means for securing secure affordable financing.
- Coordinating and improving technical competencies in
  - Fabric innovation and apparel design,
  - Factory management and supervisor training to implement modern production control and workflow systems,



- Fabric dying and finishing to innovate and produce sample fabrics with shorter lead times more economically, and
- Financing and marketing.
- Further promoting ASEAN products for use in the region by establishing two or more trade hubs with qualified staff for accelerating market linkages between ASEAN producers in different countries.

If all of these activities are undertaken, ASEAN supply chains should be able to integrate in the medium term.

## Appendix –Action Matrix

While AFTEX represents a very important regional organization, the recommendation provided in this assessment study will require numerous expertise and public private cooperation from associations, governments and international agencies, such as the Asian Development Bank and the World Bank. Listed in table 7-1 are the primary recommendations of this assessment report to attaining progress towards achieving the objectives of the VAP listed with indications of the main institutions that will have a significant interest and role in achieving the objective. Although table 7-1 indicates significant actors, it must be realized that all parties have an interest in the outcomes of each objective. So, although the ASEAN Secretariat may not be directly engaged in the establishment of a trade hub, for example, it may provide important bridges to international agencies (donors) to obtain funding.

Overall coordination of the activities, including monitoring and evaluation responsibilities ,have not been enumerated here, since the VAP does not provide a mandate for such an institution. The establishment of a central coordinator should be a principal concern on the ASEAN members to ensure the goals of the VAP are achieved.

**Table A-1***Action Matrix for the Integration of the ASEAN Textiles and Apparel Industries*

Program	ASEAN Secretariat	AFTEX	Member Governments	Local Associations	International Agencies
<b>T R A D E P R O M O T I O N</b>					
1.a Trade Hubs (minimum of two)		X		X	X
1.b Promotion of ASEAN Integration Successes (news letters, seminars, expos)		X			
1.c Development of regional product and service directory (integrated onto AFTEX web)		X		X	
<b>I N V E S T M E N T</b>					
2.a Investment Task Force	X		X	X	X
2.b Identify alternative paths to securing loans with equipment manufactures	X		X	X	
2.c Leveraging regional trade agreements (Korea, China and Japan) to improve conditions for equipment loans		X	X	X	
2d. Coordinating with international bank programs (IFC and ADB) to assist resolving country risk premiums and securing sound loans			X	X	X
<b>T R A D E A G R E E M E N T S</b>					
3.a FTA Survey Report (Status of negotiations, Rules of Origin and cumulation)	X	X	X		
3.b Acceleration of AFTA tariff reductions in CEPT countries	X		X		
3.c Elimination of VAP exemption lists (Cambodia, Philippines, Vietnam)	X		X		
<b>T R A I N I N G   A N D C O M P E T E N C I E S</b>					
4.a Productivity Training Programs			X	X	X
4.b Pre-Production Training Programs			X	X	X
4.c Business Skill and Entrepreneur Programs			X	X	X
4.d Dying and Finishing Training Programs			X	X	X
4.e Fabric Sampling			X	X	X

Program	ASEAN Secretariat	AFTEX	Member Governments	Local Associations	International Agencies
C U S T O M S					
5.a Electronic Documentation	X		X		X
5.b Green Lane	X		X		X
Reduced Inspections (risk based)					
Preferential handling at ports					